South Carolina
DHEC
Department of Health and Environmental Control
2600 Bull Street, Columbia, SC 29201

December 18, 1992

Ralph Howard
Remedial Project Manager
U.S. EPA, Region IV
345 Courtland Street
Atlanta, GA 30365

RE: Medley Farms Preliminary Remedial Design Report

Dear Mr. Howard:

The Preliminary RD Report for Medley Farms has been reviewed. The report overall looks good. The following comments need to be cleared up before this document is made final.

General Comments:

The State will agree to no VOC emissions treatment of the air stripper emissions if the SCDHEC Bureau of Air Quality Control gives written exemption. For emissions of VOCs from the SVE system, EPA will have to issues an ESD to the ROD if no treatment of these emissions is selected. The ROD states granular activated carbon (GAC) would be used to treat emissions from the SVE system. The State has reservations about not using a GAC system to treat the SVE emissions. The levels of VOCs in the soils are in the ppm range, whereas VOCs in the groundwater are in the ppb range. However, if SCDHEC Bureau of Air Quality Control gives an exemption for emissions from the SVE system, I will accept no treatment if RMT shows that the cost of treating emissions with GAC is significantly higher than just using a particulate filter.

Approval of the locations of extraction wells will have to wait until the results from the third quarter sampling is available for review. These results could change the locations of the extraction wells to ensure capture of the leading edge of the plume. When will the third quarter results be available? What groundwater flow model will RMT use to evaluate the effectiveness of the groundwater recovery system?

The treatment train selected for treating the extracted groundwater does not include any backup protection. Most treatment trains will have a GAC unit for use in startup and for backup in case of system malfunctions and maintenance. This backup system insures that water will not be discharged without treatment. RMT needs to explain their reasons for not including a GAC backup unit.

RMT needs to obtain all the necessary building permits, such as Stormwater and Soil Erosion Control permit, Cherokee County Building permit, Electrical Permit, well permits, etc.

RMT needs to explain in detail the SVE field testing proposed. The State requested a pilot test be performed to determine the design parameters for the SVE and RMT stated that a pilot test was not needed. Please explain the reasons for this change. The State agrees that field testing is needed.

Attached are additional comments from our Hydrogeology Section. If you have any questions please call me at (803) 734-5487.

Sincerely,

Richard Haynes

Richard Haynes
Site Engineering Section
Bureau of Solid & Hazardous Waste
Management

cc: Billy Britton

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MEMORANDUM

TO: Richard Haynes, Engineer
Site Engineering Section
Division of Site Engineering and Screening
Bureau of Solid and Hazardous Waste Management

FROM: Billy Britton, Hydrologist Billy Britton
Superfund and Solid Waste Section
Division of Hydrogeology
Bureau of Solid and Hazardous Waste Management

DATE: December 18, 1992

RE: Draft Preliminary Remedial Design Report
Medley Farm NPL Site
SCD 980 558 142
Cherokee County

The referenced document has been reviewed by the Division of Hydrogeology (Division), as requested. The following comments appear necessary.

1) Groundwater contamination was detected at the site at a depth of 20 feet into bedrock during the remedial investigation. However, on page 3-18 the responsible parties' (RPs') contractor proposes to install groundwater extraction wells a minimum of ten feet into competent bedrock. The Division requests that the proposed extraction wells be installed deeper into the bedrock to remediate groundwater contamination that may have migrated into lower portions of the bedrock aquifer.

2) In Appendix A, the RPs'. contractor proposes to discharge groundwater removed from the pumping wells during the interim groundwater pumping tests into an open top 55-gallon drum equipped with an aspirator for air-stripping VOCs. Following aspiration, it is also proposed that the groundwater will flow into a trench and be allowed to infiltrate to the subsurface. The Division requests that following aspiration, the water produced during the pump test be allowed to infiltrate into the subsurface at a location where soil vapor extraction is planned because as currently proposed there is no provision for determining how effective the proposed application of aspiration will be.